INFORMATION SHEET

ORDER NO. R5-2009-____
WASTE MANAGEMENT OF ALAMEDA COUNTY, INC.
ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY
ALAMEDA COUNTY

Waste Management of Alameda County, Inc., (hereafter Discharger) owns and operates the Altamont Landfill and Resource Recovery Facility. The Altamont facility covers nearly 2200 acres in the relatively isolated Altamont Hills in eastern Alameda County. Altamont is the largest landfill in the Bay Area and accepted approximately 1.7 million tons of material in 2007, which includes refuse and cover. The landfill consists of existing Fill Area 1, and a proposed expansion area, Fill Area 2. According to the Discharger's projections, Fill Area 1 will reach its capacity around 2010, given an average disposal rate of 6,000 tons/day. When Fill Area 2 is completely constructed it will have a capacity of approximately 62 million cubic yards. The waste footprint for Fill Area 2 will be less than or equal to the permitted 250 acres. If the average daily discharge remains the same as Fill Area 1, the Discharger estimates it will take approximately 24 years for Fill Area 2 to reach capacity. The facility has an estimated total capacity of 300 million cubic yards for Fill Area 1 and Fill Area 2. Fill Area 1 consists of a Class III landfill unit designated as Unit 1, and a Class II landfill unit designated as Unit 2. Fill Area 1, Unit 1 consists of both unlined and lined areas. Fill Area 2 will be constructed and managed as a Class II landfill.

The Discharger submitted a 17 September 2004 Report of Waste Discharge (RWD) as part of the Joint Technical Document for the facility. Subsequent documents have also been submitted including a December 2008 *Alternative Final Cover Design Report* for Fill Area 1, and documents related to leachate recirculation and corrective action for groundwater impacts. These revised waste discharge requirements (WDRs) approve and provide requirements for several proposals by the Discharger including: an alternative final cover for the remainder of Fill Area 1, Unit 1; recirculation of leachate into lined Class II landfill units; construction of two Class II surface impoundments for leachate storage; and the construction of Fill Area 2 on the eastern side of the facility. The revised WDRs also include a revised ground and surface water quality monitoring program, and changes to the corrective action monitoring program including requirements for the initiation of corrective action around monitoring well E-20B, and a change in corrective action approach in the Fill Area 1 main canyon area.

Low concentrations of volatile organic compounds (VOCs) were detected in groundwater below the Fill Area 1, Unit 1 landfill toe in 1982. Monitoring wells E-05 and E-07 were installed near the toe in 1985 to assist in the monitoring. A groundwater interceptor barrier (GWIB) was installed in 1987 to contain and extract groundwater in the toe area. The toe area of the landfill was closed with a prescriptive cover liner system and landfill gas collection and control were implemented as corrective actions. The VOCs noted during the initial operation of the GWIB have not been detected above reporting limits since 1992 (SCS Engineers, July, 2003). A detailed evaluation and pilot study program was conducted in 2003 and 2004 to assess the effectiveness of the GWIB. The results of the study indicated that extraction from the GWIB had no consequential effect on groundwater quality at the site, therefore, groundwater extraction from the GWIB was terminated in 2004. Based on review of the data, a Revised Engineering Feasibility Study was submitted in 2005, which included continued landfill gas extraction coupled with monitored natural attenuation as the

appropriate remedial action. Groundwater monitoring continues in this area. These WDRs adopt the new corrective action measures for this area as described in the 2005 Revised Engineering Feasibility Study. Monitoring wells E-05 and E-07 are Point of Compliance wells in this area.

Low concentrations of VOCs were detected on the east side of Fill Area 1, Unit 1 at monitoring well E-20B in 1999. Monitoring data collected from the E-20B area over the past several years have shown a continuing decrease in the concentrations of VOCs. The source of the low concentrations of VOCs detected in E-20B has been attributed to landfill gas. Landfill gas collection extraction systems were installed as corrective actions to mitigate the impact. These efforts, in addition to natural attenuation processes, have resulted in improved groundwater quality at E-20B. Based on review of the data, a Revised Engineering Feasibility Study was submitted in 2005, which included continued landfill gas and condensate extraction coupled with a monitored natural attenuation as the appropriate remedial action. To facilitate the groundwater cleanup strategy outlined in Title 27, monitoring well E-20B is now identified as a corrective action well.

The Discharger requested approval of an engineered alternative to five feet of groundwater separation for Fill Area 2 similar to that constructed in Fill Area 1, Unit 2. The WDRs conditionally approve the proposed three feet of separation for Fill Area 2 and require that the Discharger monitor the water in the groundwater underdrain for impacts. If impacts are found and confirmed, the Discharger must provide five feet of separation in all future units in Fill Area 2 constructed after the impacts are found, and also investigate and remediate the impacts as required in section E. of the WDRs, Detection Monitoring Specifications .

Topography of the site is characterized by moderate to steep rolling hills and narrow valleys with some hummocky landslide areas. Rocks underlying the site are part of the Uhalde formation consisting of mudstone with minor interbedded sandstone. Except for outcrop areas, the Uhalde Formation is blanketed by clay soil or alluvial deposits in the drainage channels and valley areas. Surface water flows from the ridges down through the valleys and discharges into local drainages. These natural drainages, which are often dry, ultimately drain toward the Sacramento-San Joaquin Delta to the east or the San Francisco Bay toward the west, when surface water flow is sufficient.

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